

Siddharth Bhattacharjee

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SKILLS

Languages and frameworks: Golang, C, C++, Python, C#, Java, Ruby, Solidity, GraphQL, React, Angular 8/JS

Tools: Kubernetes, Docker, GCP, AWS, gRPC / Protobuf, Apache Kafka, PostgreSQL, MongoDB, Elasticsearch

EXPERIENCE

Dapper Labs

Vancouver, BC (Remote)

Backend Engineer Co-op (*NBA TopShot*)

Jan 2021 - April 2021

- Architected a data verification platform from scratch in Go to accelerate Customer Support workflows; authored scripts in **Cadence**, a resource-oriented smart contract programming language, to check for data consistency between the TopShot backend and on-chain state.
- Optimized GraphQL queries by migrating resolvers to a dedicated read service and utilizing pagination and field querying. Reduced overall response time for queries by **70%**.
- Led development on implementing new restrictions on transferring NFTs to minimize fraud on the platform.
- Created data migration jobs and corresponding event handlers to facilitate aforementioned feature work and data analysis.
- Deployed, maintained and monitored services using TeamCity, kubectl and k9s.

DBRS Morningstar

Toronto, ON

Software Engineering Intern

May 2019 - August 2019

- Developed components in Angular 8 and corresponding RESTful API endpoints using ASP.NET Framework as part of new workflow to streamline ratings process for analysts.
- Designed bulk import tool allowing analysts to instantiate **1000+** ratings through Excel spreadsheets at once.
- Created **view models** used for PDF generation to automate data retrieval, reducing workflow for analysts by **45%**.

Waterloop

Waterloo, ON

Server Systems Developer

Jan 2019 - April 2019

- Designed Golang server and Protobuf interfaces for data streaming between desktop server and pod over WebSockets.
- Created Javascript + MongoDB client to test and log incoming pod information.

HORIBA Test Automation

Burlington, ON

Software Developer Co-op

Sep 2018 - Dec 2018

- Refactored XML resources using C# scripts, data models and 2-way data binding to create modular and cleaner schemas for approximately **40 device drivers**, reducing file size of device drivers by **30%-40%** and processing time by **90%**.

Bronte College

Mississauga, ON

Software Developer Co-op

Jan 2018 - April 2018

- Implemented payment and registration portals for AP exams using AngularJS and PHP.

PROJECTS

Twitch Data CLI (*Python, Pandas, Matplotlib*)



- Real-time CLI data tool to analyze over **40,000+** streamed messages per hour sent over IRC protocol using WebSockets and display relevant information like user engagement and viewer count.

Palmpong-v2 (*React-Konva, Tensorflow.js*)



- Clone of arcade game 'pong' using React-Konva and Tensorflow.js where the user controls the paddle with their palms.

EDUCATION

University of Waterloo

Class of 2023

Bachelor of Applied Science in Computer Engineering

Term - 3B

- **Relevant Courses:** Real-Time Operating Systems (ECE 350), Systems Programming and Concurrency (ECE 252), Compilers (ECE 351), Database Systems (ECE 356), Computer Networks (ECE 358)